

# Libby Asbestos Site Conceptual Site Model Operable Unit 4

July 11, 2006

Flathead Valley Community College  
Libby, Montana



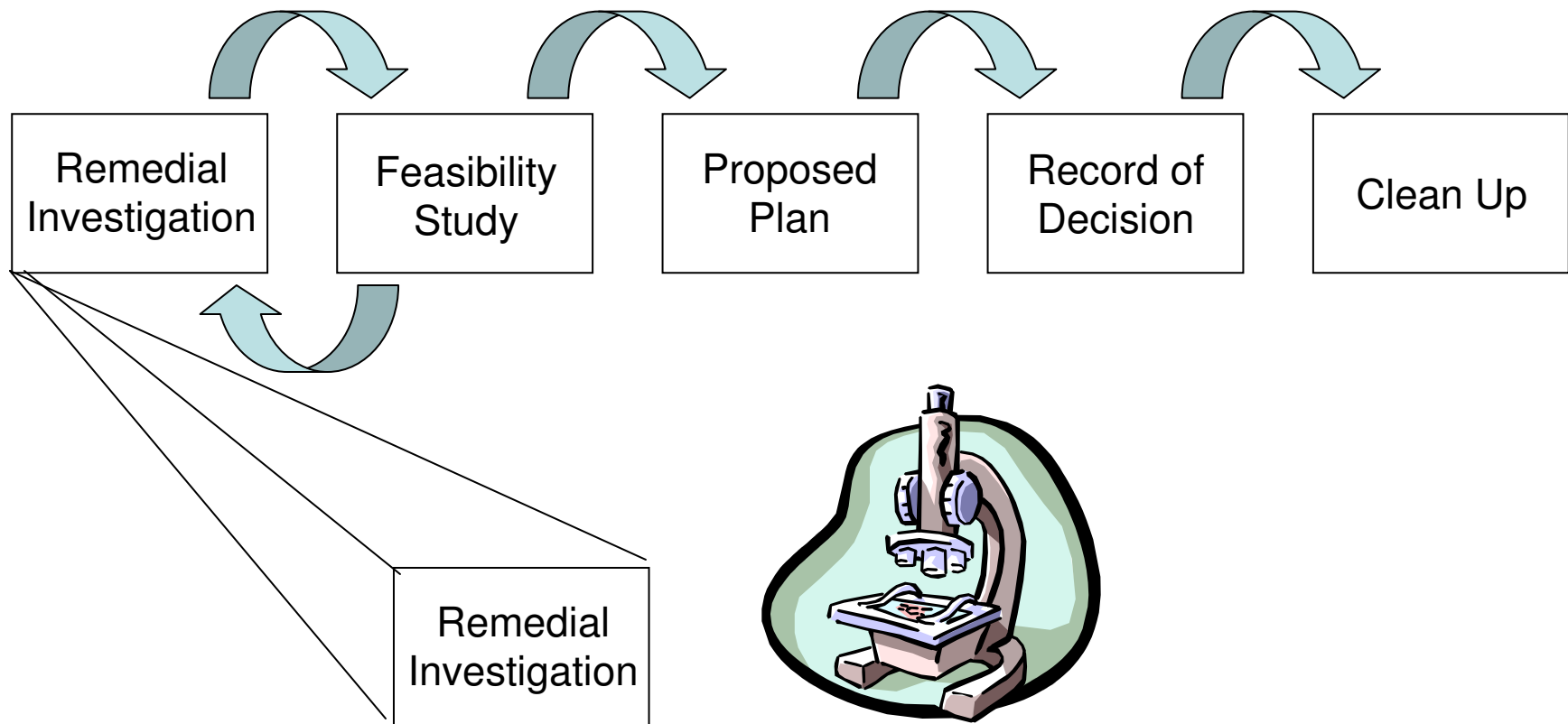
# Roadmap

- Superfund Actions (Programs?)
- Superfund Remedial Process
- Baseline Risk Assessment
- Conceptual Site Model

# Superfund Actions (Programs?)

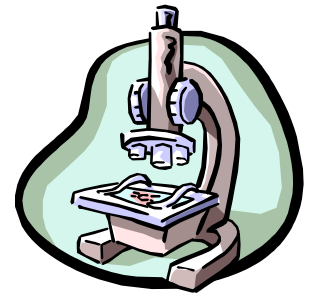
- Removal Actions
  - Immediate short-term response
  - Intended to protect people from immediate threats
  - May occur at NPL or non-NPL sites
- Remedial Actions
  - Long-term cleanups
  - Designed to prevent or minimize the release of hazardous substances
  - Reduce risks and danger to public health or the environment

# The Superfund Remedial Process



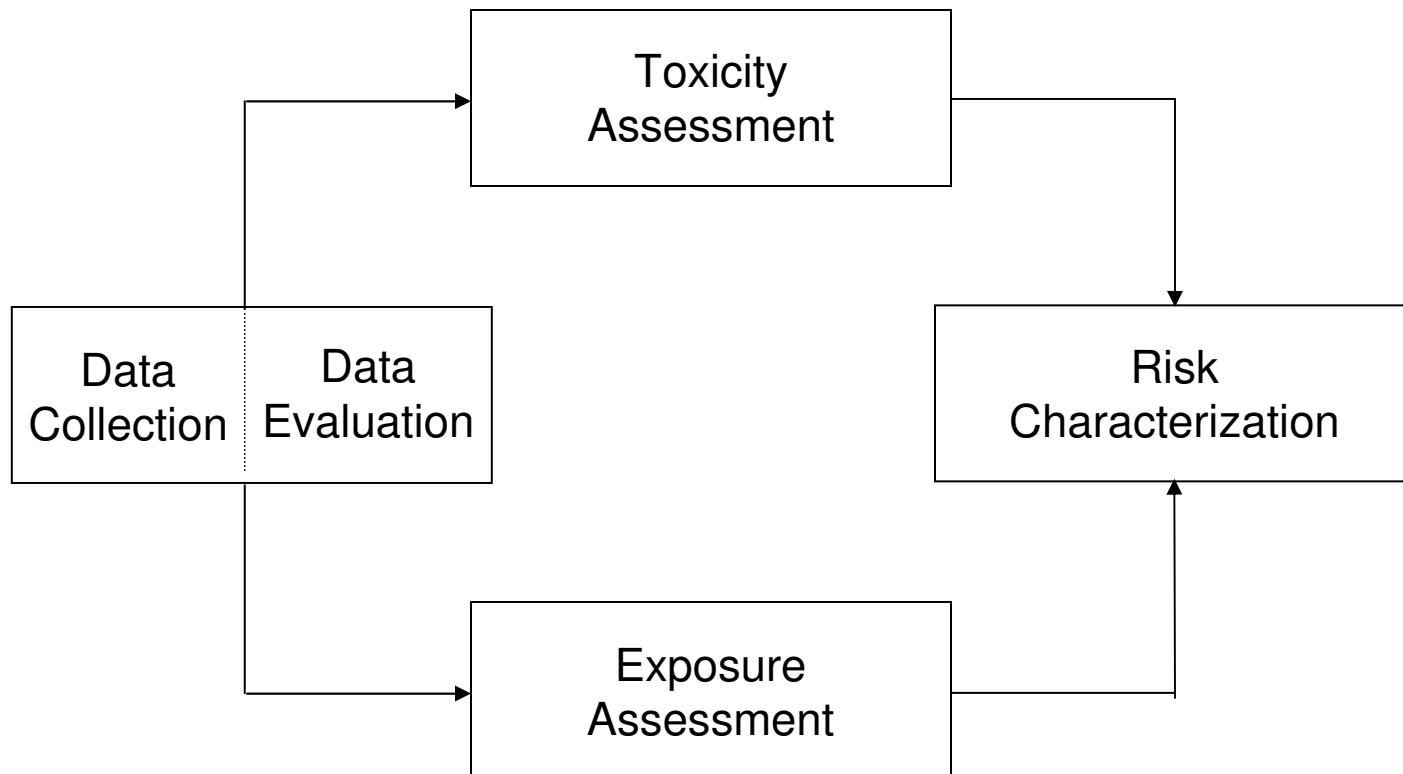
# Remedial Investigation

- Serves as mechanism for collecting data to
  - Characterize nature and extent of contamination
  - Assess risk to human health and the environment
  - Support the Feasibility Study



# Baseline Risk Assessment

## *Human Health*



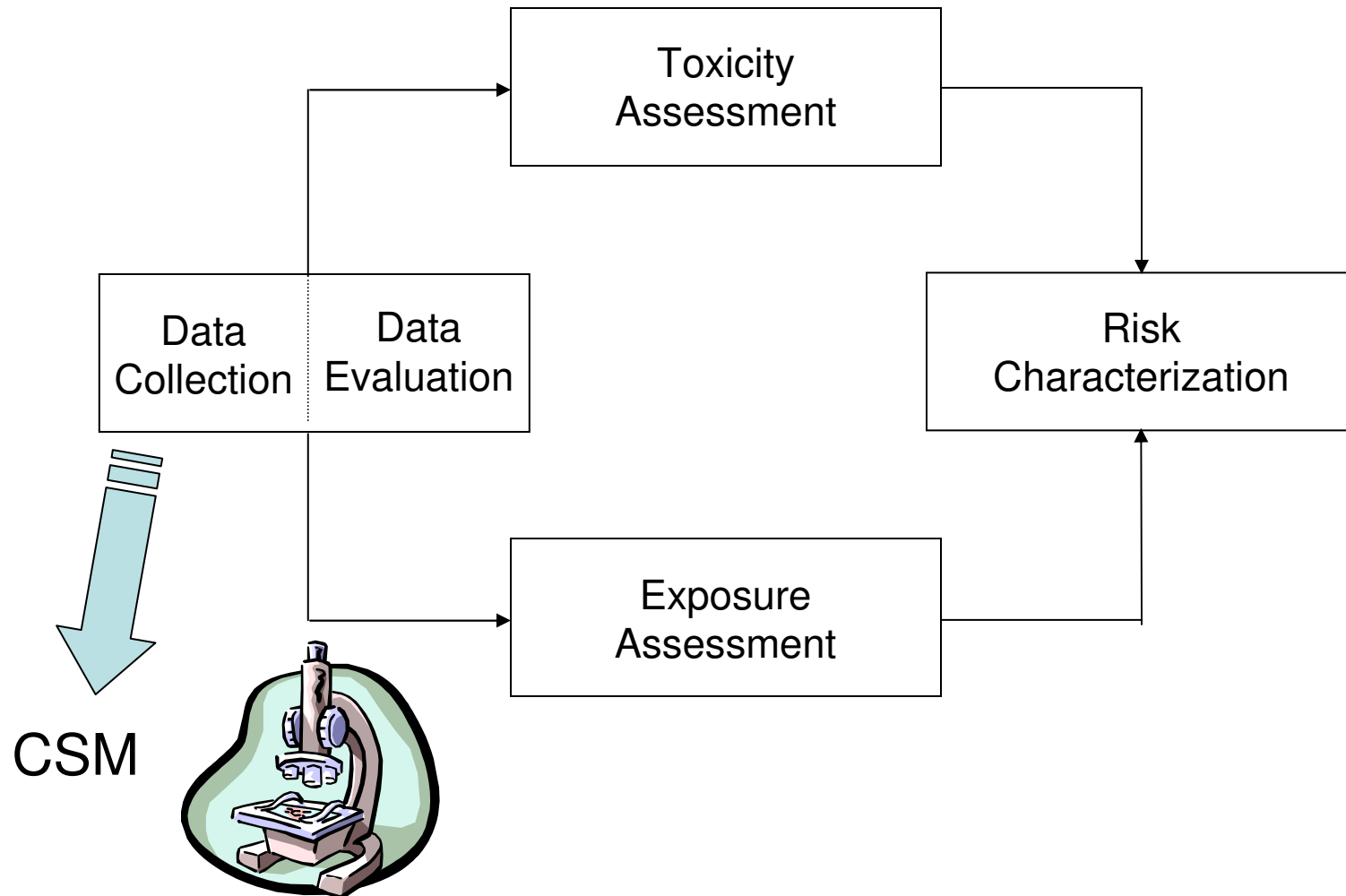
# Baseline Risk Assessment

## *Human Health*

- Identifies primary health threats at the Site
- Identifies existing or potential risks that may be posed to human health at the Site
- Provides valuable input to the development and evaluation of alternatives during the Feasibility Study

# Baseline Risk Assessment

## *Conceptual Site Model (CSM)*





# Purpose of CSM

- Identifies primary source of contamination in environment
- Shows how contaminant at the original point of release might move in the environment
- Identifies the different types of human populations that might come in contact with contaminated media
- Lists potential exposure pathways that may occur for each population

“The formulation of  
a problem is  
often more  
essential than  
its solution”

Albert Einstein

Insert  
photo  
of AE  
here

# Let's talk about the OU4 CSM

- Sources of contamination
- Environmental transport & contaminated media
- Receptors
- Potential exposure pathways (reasonable & plausible)

KEY									
●	Pathway is complete and exposure may be significant; quantitative evaluation is warranted								
○	Pathway is complete but is believed to be minor in comparison to other pathways; qualitative evaluation is warranted								
?	Pathway may be complete but magnitude of exposure is uncertain; further investigation may be necessary								
	Pathway is incomplete or believed to be negligible; further evaluation is not warranted								

The CSM serves as a blueprint for future investigations and may be updated as new information becomes available.